

State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

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March 10, 1994

TO:

Minerals File

FROM:

Anthony A. Gallegos, Reclamation Engineer

RE:

Evaluation of 1/10/94 Permit Amendment, Interstate Brick Company (IBC),

Fivemile Pass Mine, M/045/006, Tooele County, Utah

I have reviewed the correspondence files for the Fivemile mine in order to evaluate IBC's request to re-assign a portion of the existing reclamation surety to the new amendment area. A copy of my file review notes is attached. Some documents in the files gave the impression that this operation is bonded for 71 acres of disturbance, of which approximately 25 acres have been disturbed. This would mean there is a surplus of bonding for 46 acres. If so, this surplus bonding could be re-assigned from those bonded areas which IBC has not disturbed to the new amendment area. A more in-depth review of the files reveals that this is not the case. This operation appears to have a permit boundary which delineates the properties owned by IBC which is in excess of the area covered by the reclamation surety. Within this larger property/permit boundary, IBC has been bonded for approximately 28 acres of mining disturbance. In addition, IBC has dropped some leases with State Lands and Forestry which made up a portion of that original property/permit boundary.

Another misleading factor is the listing of the disturbed area in the executive summary (for the 1989 Board package) in the categories of "existing, proposed and abandoned." From the correspondence and discussions with IBC, the "proposed" area was the new area IBC proposed to mine at that time. The "existing" area was the current amount of disturbance created by IBC as of the date of the estimate/executive summary. The "abandoned" category includes the disturbance created prior to IBC's operations or created by IBC prior to the act. It is unclear if the "abandoned" category is based upon the date of the BLM regulations or state regulations. No descriptive breakdown of the disturbances included in each category could be found in the file. It is likely that the abandoned areas were included to identify disturbed areas within the permit area which were not the responsibility of IBC.

The revised reclamation estimate which was accepted by the Board is dated 9/6/88 and includes revegetation of 28 acres of disturbance. The Board package is dated



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3/8/89. The map with the date closest to these dates is the 9/8/88 autocad map from the mine detail survey of 8/20/85 by S. Brower. That map lists disturbances under the "abandoned, present and proposed" categories. This map should agree with the accepted reclamation estimate. Digitizing the areas shown on the 9/8/88 map gives the following breakdown of approximate areas: "abandoned" 10.64 acres, "present" 26.93 acres, "proposed" 22.22 acres, and disturbances not associated with IBC 4.76 acres. The acreage in the "present" category of approximately 27 acres is close to the figure of 28 acres shown in the 9/6/88 reclamation estimate. The discrepancy between the two figures may be attributed to the inclusion of the reload pad (0.46 acres), and the difference between using measurements from the autocad file and digitizing by hand.

There are several differences between the areas IBC claims responsibility for in the 9/8/88 map and the 2/11/94 map. These differences may need to be discussed with IBC in order to resolve any misunderstandings. The 2a pit (1.09 acres) is shown as the responsibility of IBC in the 9/8/88 map and not labelled on the 2/11/94 map. The entire 2e pit (7.76 acres) is shown on the 9/8/88 as the responsibility of IBC. On the 2/11/94 map the 2e pit is shown as a pre-law area, partially backfilled and the site for future additional backfill. The collection of four small pits listed as 2b (0.80 acres total) is shown as the responsibility of IBC on the 9/8/88 map, but is not labelled on the 2/11/94 map. The entire 2d spoil dump (7.81 acres) is shown on the 9/8/88 map as the responsibility of IBC. The 2/11/94 map does not include a label or description for the 2d dump. The three satellite topsoil stockpiles (0.31 acres total) shown as "proposed" on the 9/8/88 map do not appear on the 2/11/94 map. Spoil dump 1b (3.37 acres) is listed as abandoned on the 9/8/88 map and is not labelled on the 2/11/94 map. During the 1/28/94 site inspection, IBC was in the process of removing clay which had been stockpiled on the top of the 1b spoil dump.

By comparing the 9/8/88 map with the 2/11/94 amendment map we can determine if there is a surplus of bonding. See the enclosed sheets titled "Disturbed Area Calculations I" and "Disturbed Area Calculations II" for a listing of the features and their respective acreages. Using this comparison along with information from the amendment proposal and the site inspection of 1/28/94 gave the following breakdown of areas: present 28.96 acres, proposed 18.72 acres, not associated with IBC 15.40 acres. The "present' category represents all areas presently disturbed and the reclamation responsibility of IBC. The "present" category includes all areas shown on the 9/8/88 map as the responsibility of IBC, plus additional areas shown on the 2/11/94 map as IBC's responsibility, plus areas known to be disturbed by IBC from the 1/28/94 site inspection. The "proposed" category represents areas proposed to be disturbed by IBC as part of this amendment. The category of "areas not associated with IBC" are disturbed areas which are not the reclamation

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responsibility of IBC. These disturbances not associated with IBC may have been pre-law or created by someone other than IBC.

This evaluation shows the current total disturbance of approximately 29 acres exceeds the 28 acres described by the 9/6/88 reclamation estimate by one acre. This one acre excess may be attributed to the rough approximation on the map of the existing topsoil stockpile area of 1.07 acres. Therefore, as of this date, there is no surplus of reclamation surety coverage for the Fivemile Pass Mine prior to initiation of the proposed 1/10/94 amendment.

jb

Attachments

CC: Jerry Morth , Suterstate Brick

Interstate Brick Company (IBC) Fivemile Pass Mine M/045/006

File Review Notes February 25, 1994

Anthony A. Gallegos and

September 5, 1985 DOGM memo: IBC mining pit 2e(~20-25 acres) on patented claims. North of pit 2e, on BLM land, 15-20 acres of varying pit disturbances pre 1981.

<u>December 18, 1985 DOGM technical concerns:</u> Feature 2f is outside of permit boundary. Plan indicates topsoil from 25.5 acres, 6 inches deep = >20,604 yd³, which is less than one half of the 53,240 yd³ previously indicated. Source of topsoil substitute must be shown on a map.

IBC Annual Report for 1985: 45 acres total disturbance, 20.4 acres pre-act. Spoil placed in pit 3d (alias pit 2e) or back into pit 3e (alias pit 2g). Mined clay from pit 3a.

May 9, 1988 DOGM letter: Reclamation cost estimate \$58,700 in 1993\$ [\$52,400 in 1988\$]. Estimate encompasses 24.8 acres of existing disturbance and 3.2 acres of proposed disturbance. Reclamation estimate calls for entire disturbed area to be seeded and fertilized. Line item quantity is 28 acres in estimate.

May 11, 1988 DOGM inspection memo: Current post law disturbance ~25 acres. Main pit is almost mined out. Rick of rock around pit prevents ATV's from driving into pit.

June 23, 1988 DOGM inspection memo: Spoils pile 4c blocking drainage. [alias pile 2d].

<u>September 6, 1988 IBC response:</u> Area 2f (reload pad) is on BLM land. Material at 2f will be moved inside permit boundary. Updated map submitted. Except for the pit itself, roads shown on the map are permanent and not created by the operator. Proposed mining area is 25.5 acres, only about 20 acres will be excavated. Updated map shows topsoil stockpiles - to be seeded and monitored as test plots. Submission included: narrative, addenda pages to the MR-1 form and updated map.

<u>December 1, 1988 DOGM memo:</u> IBC reclamation estimate of \$52,500 - 1993\$ accepted. Line item lists 28 acres of seeding.

<u>December 15, 1988 Public Notice:</u> Describes mining and reclamation techniques on approximately 50 acres of private and federal land.

<u>January 12, 1989 RDCC (?) letter</u>: State action form says \$52,500 for reclamation of approximately 50 acres of existing and proposed surface disturbance on private and federal lands.

Page 2 File Review Notes M/045/006 February 25, 1994

Annual Report for 1988: 25 acres of unreclaimed disturbance (by Frank Filas, DOGM).

March 9, 1989 Board package: Executive summary - acres to be disturbed: existing 24.8, proposed 25.5, abandoned 20.4.

Annual Report for 1989: 25 acres of unreclaimed disturbance.

June 9, 1989 MR-RC: Page 1 of 8 lists the disturbed area as 71 acres.

jb M045006.aag

DISTURBED AREA CALCULATIONS - I

DRAFT

filename M45-06MP.WQ1

Interstate Brick Company

last revision

03/10/94

Fivemile Mine

M/045/006

Tooele County, Utah

Prepared by Utah State Division of Oil, Gas & Mining

- -These figures are based on the map titled "Fivemile Mine Updated Detail Map"
- -The map title block refers to a mine detail survey of 8/20/85; map scale 1 inch = 600 feet
- -This map was received by the Division on 9/8/88
- -Feature IDs in bold are designations made by DOGM for features which were nameless on the 9/8/88 map; Other feature IDs are the same as on the map
- -The 3/9/89 executive summary listed acreages to be disturbed as: existing 24.8 acres, proposed 25.5 acres, abandoned 20.4 acres

Feature	Feature					
ID	type		abandon.	present	proposed	not IBC
2a	pit			1.09		
2e	pit			7.76		
2g	pit			1.68		
2b	pit			0.80		
1d	spoil dump			5.47		
2d	spoil dump			7.81	=	
2c	spoil dump			1.86		
2f	reload pad			0.46		
TS	topsoil stockpil	е			0.31	
1a	pit		2.93			
1h	pit		0.16			
1b	spoil dump		3.37			
1c	spoil dump		1.63			
1cc	spoil dump		0.87			
1f	spoil dump		1.02			
1g	spoil dump		0.66			
1i	pit?					1.17
2f-p	proposed reloa	•			2.01	
NEW	proposed new	pit			19.90	
N1	spoil dump?					0.82
N2	spoil dump?					0.88
N3	pit					0.98
N4	spoil dump?					0.67
N5	earth dam					0.14
N6	rock dam					0.10
PART I	- TOTALS (acres)	10.64	26.93	22.22	4.76
			abandon.	present	proposed	not IBC

DISTURBED AREA CALCULATIONS - II

DRAFT

filename M45-06MP.WQ1

Interstate Brick Company

last revision

03/10/94

Fivemile Mine

M/045/006

Tooele County, Utah

Prepared by Utah State Division of Oil, Gas & Mining

- -These calculations are for evaluation of the 1/10/94 Interstate amendment
- -Refer to the map "Utah Fire Clay Claims Five Mile Pass, Utah County, Utah"
- -This map was received by the Division on 2/11/94; map scale 1 inch = 400 feet
- -"Present" means presently disturbed & the reclamation responsibility of Interstate
- -"Proposed" means proposed to be disturbed by Interstate
- -"Not IBC" means Interstate is not responsible for reclamation of this disturbance
- -This list is based on: file review, site inspection of 1/28/94, & the amendment proposal
- -The feature IDs from the 9/8/88 map & the 2/11/94 map have been cross referenced
- -Several features are shown, but not labelled on the 2/11/94 map
- -2/11/94 map IDs: 1 = current open pit; 2 = topsoil stockpile; 3 = pre-law disturbance & Phase-I; 4 = new pit in pre-law site; 5a = pre-law disturbances; 6 = old clay stockpile; black dashed line = new property; dotted line = amendment area; 8 = clay stockpiles

9/8/88	2/11/94	Feature			
ID	ID	type	present	proposed	not IBC
2a	not included	pit	1.09		
2e	1 & 2e & 5a	pit	7.76	,	
2g	4	pit	1.68		
2b	not included	pit	0.80		
1d	5a	spoil dump	5.47		
2d	not included	spoil dump	7.81		
2c	5a	spoil dump	1.86	·	
2f	6	reload pad	0.46	= 13	
TS	not shown	topsoil stockpiles	0.00		
1a	not included	pit		1.1	2.93
1h	not included	pit		=	0.16
1b	not included	spoil dump (4)	0.85		3.37
1c	not included	spoil dump			1.63
1cc	not included	spoil dump			0.87
1f	5a	spoil dump			1.02
1g	5a	spoil dump			0.66
1i	5a .	pit?			1.17
2f-p	not shown	reload pad		0.00	* *
N1	5a	spoil dump?			0.82
N2	5a	spoil dump?			0.88
N3	3 & 5a	pit			0.98

N4	5a	spoil dump?			0.67
N5	5a	earth dam			0.14
N6	5a	rock dam			0.10
	Phase I *	pit		5.05	
	Phase II *	pit		2.30	
	Phase II *	pit		2.87	
	8	clay stockpiles (1)	0.68	2.00	
	2	topsoil stockpile (2)	0.50	1.50	
	not shown	proposed "floating" area		5.00	

exploration-not shown	trenches (3)	0.55 NA		
PART II - TOTALS (acres)		28.96	18.72	15.40
		present	proposed	not IBC

^{*} indicates areas which were calculated from data submitted in the amendment

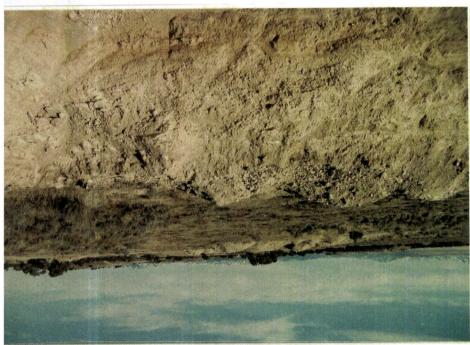
^{(1) 2} acres of clay stockpiles are proposed in the amendment

^{(2) 0.50} acres is an estimate of the existing topsoil stockpile

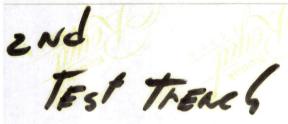
⁽³⁾ existing exploration trenches will be mined through or reclaimed as part of amendment

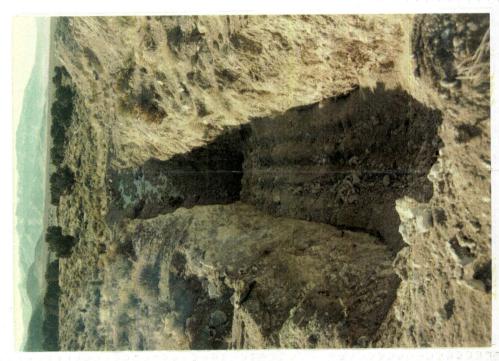
⁽⁴⁾ Approximately 1/4 of dump 1b has been re-impacted by IBC

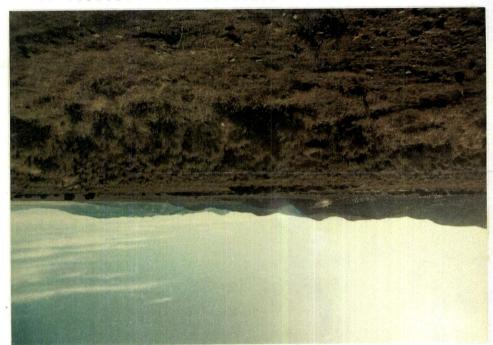


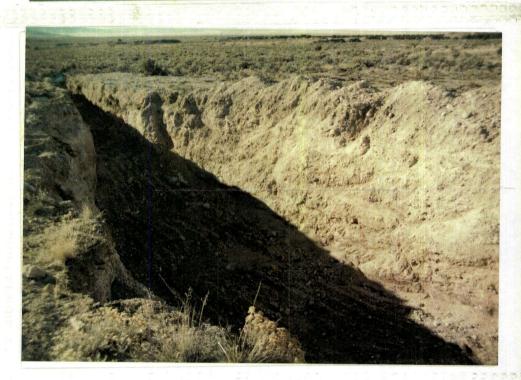










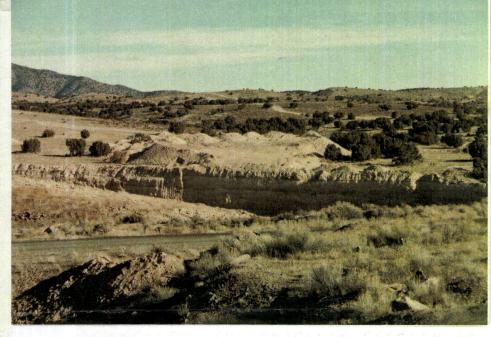


1-54 TEST TENCH

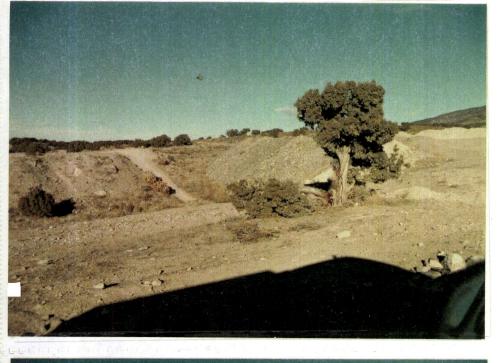
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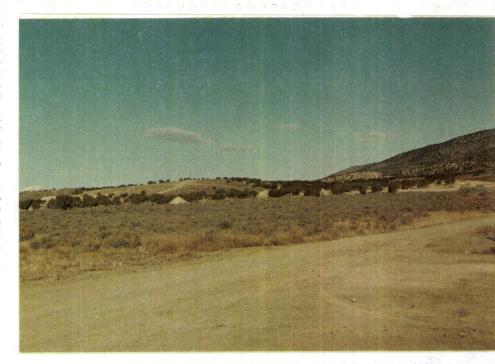




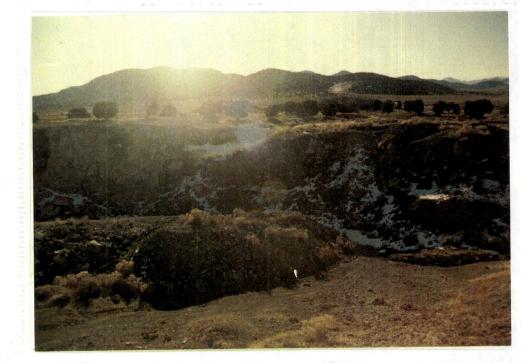


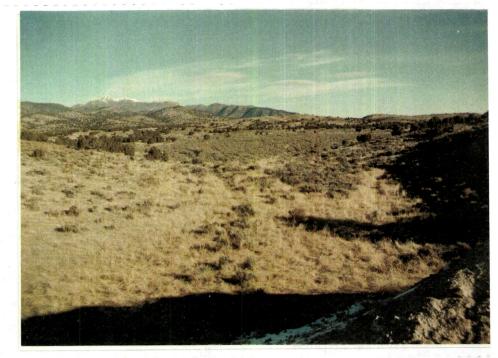


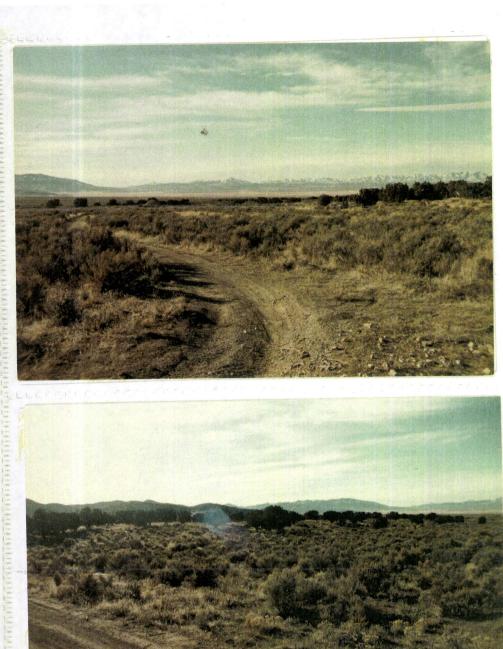






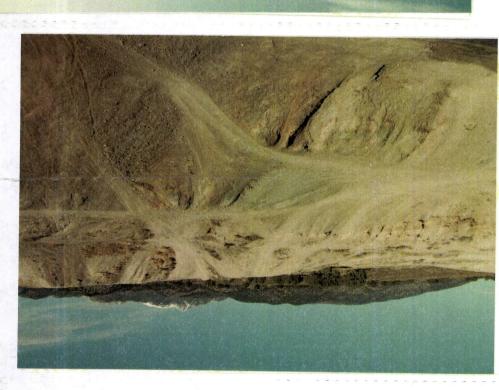


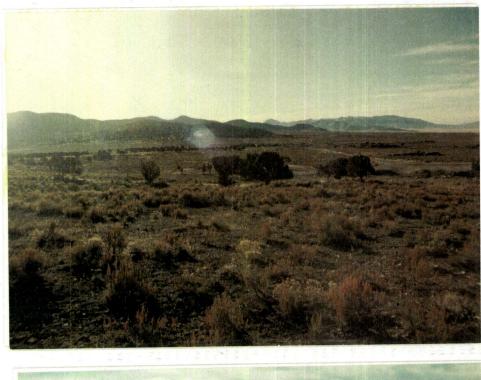


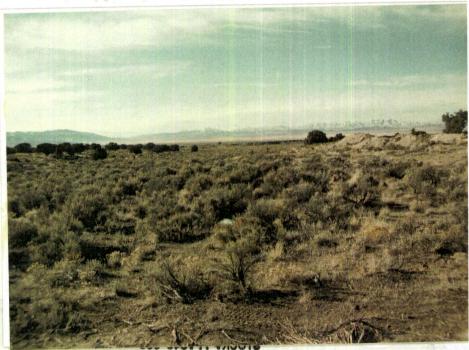








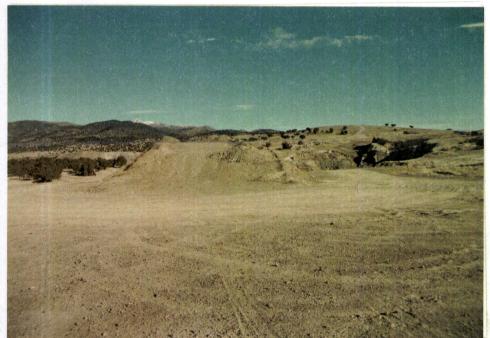


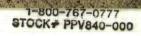


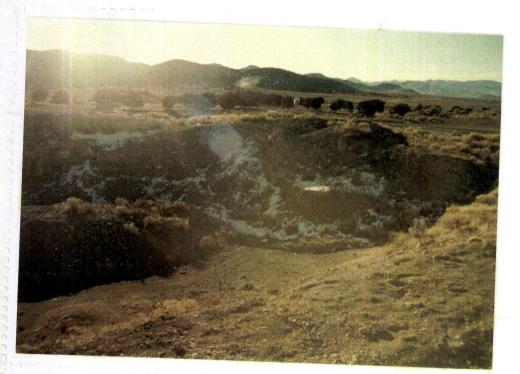


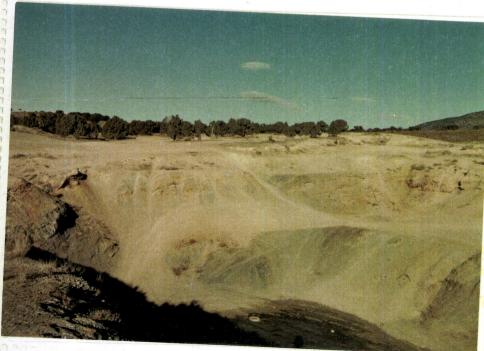


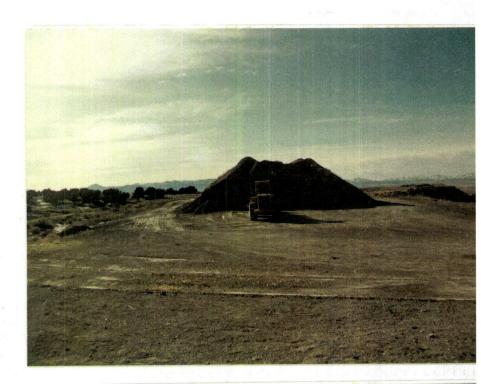












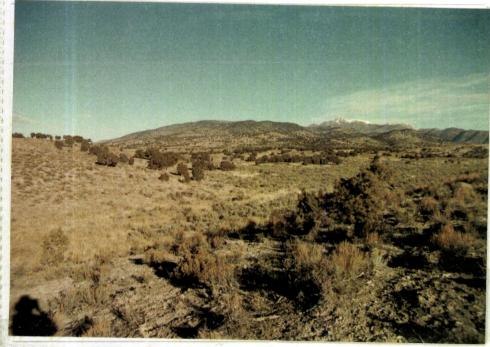


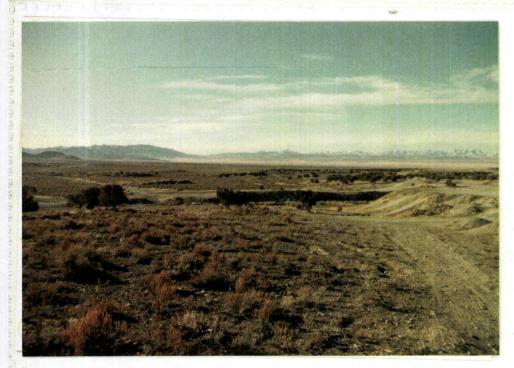
Weyr, tree



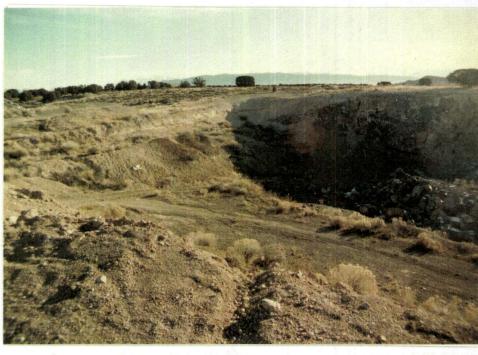






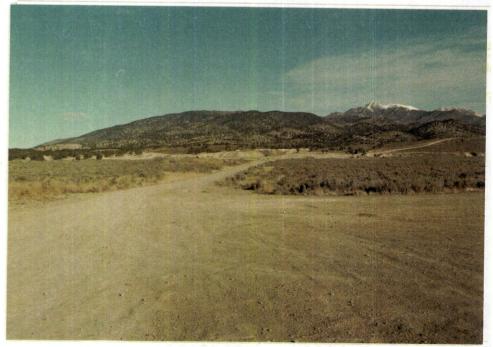














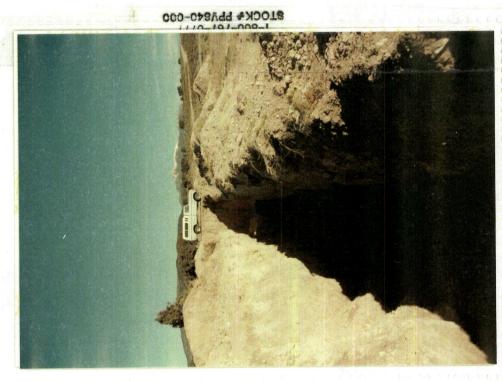














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